

## ABSTRACT OF THE DISCLOSURE

A reinforced polymer matrix composite material with anti-anisotropy reinforcement array is disclosed having coupled fiber reinforcement structures. The coupled fiber reinforcement structures are formed of a plurality of bound or bonded fibers, which form multi-dimensional structures capable of maintaining cross structure during molding. The structures are sized to allow their use in various molding processes. The coupled multiple fiber structures preferably have an aspect ratio of less than ten.